

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Ely Field Office
HC 33 Box 33500 (702 No. Industrial Way)
Ely, Nevada 89301-9408
<http://www.nv.blm.gov/>

In Reply Refer To:
3160 (NV-043)
NV-040-04-029
N75072

Dear Interested Party:

Enclosed is the Decision Record/Finding of No Significant Impact (DR/FONSI) for the Pioneer Oil and Gas oil and gas drilling project. The decision to authorize the proposed action is issued full force and effect. The supporting Environmental Assessment (EA NV-040-04-029) is available on the Ely Field Office website: http://www.nv.blm.gov/ely/nepa/ea_list.htm.

Implementation of the proposed action will allow Pioneer Oil and Gas to exercise its rights under the lease agreement to explore for reserves of oil and gas so as to meet the increasing energy needs of this Nation. Any impacts resulting from the proposed action will be minimized through the carefully planned proposed action developed in the APD, the standard State and Federal operating regulations for oil and gas exploration, and the conditions of approval.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations at 43 CFR, Part 4. If an appeal is taken, your appeal must be filed with the Bureau of Land Management, Ely Field Office, HC33 Box 33500, Ely, Nevada, 89301, within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition pursuant to regulation 43 CFR 4.21 or 43 CFR 3000.4 for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. Copies of the notice of appeal and petition for a stay must also be submitted to the Interior Board of Land Appeals, Office of Hearings and Appeals, 4015 Wilson Boulevard, Arlington, VA 22203, and to the Office of the Solicitor, U.S. Department of the Interior, Suite 6201, Federal Bldg., 125 South State St., Salt Lake City, Utah, 84138, at the same time the original documents are filed with this office.

If you request a stay, you have the burden of proof to demonstrate that a stay should be granted. A petition for a stay of a decision pending appeals shall show sufficient justification based on the following rules:

- (1) The relative harm to the parties if the stay is granted or denied,
- (2) The likelihood of the appellant's success of the merits,

- (3) The likelihood of immediate and irreparable harm if the stay is not granted, and
- (4) Whether the public interest favors granting the stay.

Thank you for your participation in this EA and your interest in public lands. If you have any questions, please contact Bill Wilson at (775) 289-1882.

Sincerely,

Jeffrey Weeks
Assistant Field Manager
Nonrenewable Resources

Enclosure:
Pioneer Oil and Gas EA and DR/FONSI

WWilson:ww

**Decision Record
And
Finding of No Significant Impact
For
Pioneer Oil and Gas
Yankee Mine West #1**

Lease No. N75072

NV-040-04-029

Decision: It is my decision to authorize the Pioneer Oil and Gas oil and gas well located in White Pine County and described in the proposed action of the Environmental Assessment (EA). I concur with my staff's assessment of the environmental impacts and authorize the proposed action subject to the standard stipulations that are a part of State and Federal operating regulations, the Egan Resource Management Plan, and the site-specific conditions of approval (COAs) as listed below:

COAs

1. All available topsoil from pad and road construction will be salvaged and immediately seeded with the interim topsoil seed mix in Attachment 4 of the EA to help prevent establishment of invasive, non-native weeds. An additional interim seeding may be required.
2. The final reclamation seed mix as shown in Attachment 5 of the EA will be planted between October 1 and March 15, following final grading of the pad and reserve pit, and will utilize a well prepared seed bed. Substitutions for plant species that may not be available or slight modifications of the planting times will be negotiated with the Ely Field Office BLM.
3. Reclamation will include performance standards for revegetation success such that the reclaimed area will have at least 100% of the perennial canopy cover of the existing adjacent plant cover. The site will be evaluated by the Ely BLM for vegetative progress after at least one full growing season. If not successful, Pioneer Oil and Gas and the BLM reclamation specialist will review the reclamation procedures to decide on the best course of action to achieve success.
4. Pioneer Oil and Gas will be responsible for complete control of any noxious weeds identified within the project area during the life of this project. The proponent will be responsible for taking steps to mitigate the spread or increased densities of invasive weeds that result from implementation of the proposed action.

5. Pioneer Oil and Gas will implement the Ely Field Office Noxious Weed Prevention Schedule and SOPs for weed treatments, with special emphasis on the following actions. Prior to entering the site, all construction, drilling equipment, and vehicles will be washed down and cleaned to prevent the importation of noxious weed seeds from prior places of work. Vehicles will stay on roads and avoid driving through any weed patches. All seeds used in reclamation will be certified weed-free. Pioneer Oil and Gas will assist monitoring for noxious weeds during the life of the project, until reclamation is complete.

6. Noxious weeds, which may be introduced due to soil disturbance and reclamation, will be treated by methods to be approved by the authorized officer. These methods may include biological, mechanical, cultural or chemical. Should chemical methods be approved, the lessee must submit a Pesticide Use Proposal to the authorized officer 60 days prior to the planned application date. All BLM and Ely Field Office SOPs for weed treatments will be complied with. Copies of all Pesticide Application Reports will be provided to the Ely Field Office Weed Coordinator and to the Nevada Department of Agriculture.

7. Pioneer Oil and Gas will be responsible for the construction and removal of the reserve pit fence. Fence construction diagrams are shown in Attachment 3 of the EA.

8. The well site area will be kept clean and free of trash. Every measure will be taken to keep the area around the well site free of any contaminants that could enter the groundwater water source.

9. Operations commencing during the period May 1 to July 15 will be subject to the provisions of the Ely District policy management actions for the conservation of migratory birds. A qualified wildlife biologist will survey the area for nesting migratory birds. If any are found, operations will be postponed until after July 15.

Monitoring

Monitoring will consist of periodic compliance inspections of the area during the life of the drilling operations by an authorized officer of the BLM. This monitoring will consist of checks on initial location of facilities, compliance with Federal regulations, and the status of any reclamation. Periodic checks for establishment of noxious weeds will also occur during these site visits.

Rationale: Implementation of the proposed action will allow Pioneer Oil and Gas to exercise its rights under the lease agreement to explore for additional reserves of oil and gas so as to meet the increasing energy needs of this Nation. Any impacts resulting from the proposed action will be minimized through the carefully planned proposed action developed in the APD, the standard State and Federal operating regulations for oil and gas exploration, and the site specific conditions

of approval as listed above. As a result of the analysis for the proposed oil and gas well, it was determined that the Proposed Action will not result in unnecessary or undue degradation to the public lands. The proposed action is in conformance with Egan Resource Management Plan and is consistent with the White Pine County Land Use Plan (May 1998).

FONSI: Based on the analysis of Environmental Assessment NV-040-04-029, I have determined that the quality of the human environment will not be significantly impacted as a result of this decision. Therefore, an Environmental Impact Statement is not required.

Rationale: This finding of no significant impact is based on the following. There are no unique or unknown risks that will occur as a result of this proposed action. There are no significant effects, either beneficial or adverse, that will result as a consequence of the proposed action. The proposed action will not affect unique characteristics of the geographic area. The proposed action will not adversely affect sites that are in or eligible for listing in the National Register of Historic Places, or may cause loss or destruction of significant scientific, cultural, or historical resources. There are no endangered or threatened species or habitat that will be affected by the proposed action. The proposed action will have no effect on public health and safety and does not violate any Federal, State, or local laws imposed for the protection of the environment.

Jeffrey Weeks
Assistant Field Manager
Nonrenewable Resources

Date



ENVIRONMENTAL ASSESSMENT

NV-040-04-029

APPLICATION FOR PERMIT TO DRILL

PIONEER OIL AND GAS

LEASE NO N75072

WELL

Yankee Mine West #1

LOCATION: BUCK MOUNTAIN

WHITE PINE COUNTY, NEVADA

PREPARED BY

BUREAU OF LAND MANAGEMENT
ELY FIELD OFFICE

AUTHOR

William R. Wilson

October 2004

I. BACKGROUND INFORMATION

Introduction

On August 5, 2004, the Ely Field Office of the Bureau of Land Management received a Notice of Staking from Pioneer Oil and Gas for an oil and gas well, Yankee Mine West #1, located in Section 21, T. 21 N., R. 57 E., MDBM. The proposed wildcat well is on Oil and Gas Lease N75072 approximately 47 miles northwest of Ely, White Pine County, Nevada - Figure 1. A pre-drill, onsite, inspection was held on August 26, 2004 to evaluate whether there were cultural or other site specific resources which might be adversely affected at the proposed location. An Application for Permit to Drill (APD) (Attachment 1) was then submitted and received in the Nevada BLM State Office on September 7, 2004.

The project area is along the eastern flank of Buck Mountain, west of Long Valley, about two miles west of the Yankee Gold Mine. Several oil wells have been drilled in and around Buck Mountain - in Long Valley and Newark Valley. Producing oil fields are located in Railroad Valley, approximately 70 miles south of the project area, and in Pine Valley, approximately 50 miles to the northwest. Several geophysical surveys have been conducted in the valley areas. Oil and gas exploration in this area was stimulated by an oil seep that was exposed in the pit walls during mining of the Yankee Pit.

Drilling operations within present leases cannot be cancelled by the denial of an APD. The Mineral Leasing Law of 1920, as amended, allows areas to be leased for oil and gas exploration and development. Leasing areas are developed through BLM's planning process. The individual who has the lease has the right to drill for oil and gas within that lease. The right to drill for oil on the lease also gives them a right to reach the proposed well site by a road route, the location of which has to be reasonable and cause no undue degradation to the environment.

The proposed Yankee Mine West #1 well is designed to test for oil. Should a discovery be made, it would be put into production with no additional ground disturbance. This NEPA analysis will evaluate both the exploration drilling and potential production of the Yankee Mine West #1 location, if successful and desirable, subject to existing oil and gas regulations.

Need for the Proposal

The need is for a private corporation to seek an economic use of the public lands by drilling an exploratory well for oil and gas under appropriate Federal leases in the attempt to help meet the increasing demand for oil and gas in the United States.

Relationship to Planning

The Proposed Action is in conformance with the Proposed Egan Resource Management Plan (RMP) and Final Environmental Impact Statement (FEIS), September 21, 1984, which states "the public lands shall remain open and available for mineral exploration and development unless withdrawal or other administrative action is clearly justified in the national interest" (page 15). The Egan Resource Management Plan; Oil and Gas Leasing Amendment and Record of Decision, May 1994, specifically incorporates oil and gas leasing into the land use plan.

The Egan Resource Management Plan; Proposed Oil and Gas Leasing Amendment and Final Supplemental Environmental Impact Statement, August, 1993, analyzes impacts, including cumulative impacts, for actions such as the proposed action – wildcat oil and gas well drilling. That document is incorporated by reference into this environmental analysis. The document is available at the Ely Field Office, Bureau of Land Management in Ely, Nevada.

The White Pine County Land Use Plan (LUP) (May 1998) does not specifically address oil and gas leasing. However, the proposed action is consistent with this LUP, which encourages exploration and development for mineral resources.

Issues

No issues were identified during internal scoping in relationship to the proposed drilling and potential production of this oil and gas well.

II. DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

Proposed Action

Pioneer Oil and Gas proposes to drill a wildcat oil and gas well approximately 47 miles northwest of Ely, White Pine County, Nevada. Construction and drilling operations for Yankee Mine West #1 would commence in the fall of 2004, depending on weather and rig availability. It would take approximately two months to complete the road and pad construction, drilling, and initial reclamation. If unsuccessful, the well would be immediately plugged and abandoned. Reclamation would be completed in approximately three years.

Should the well be successful, production operations would last for several years. Production operations are generally handled through Sundry Notices (standard forms to notify or approve well operations subsequent to an APD) and associated permitting, unless they involve additional disturbance for which additional NEPA analysis is required. Typical activities include development of the well, installation of pumping and storage facilities, hauling of the oil to a process facility – usually one to two tanker truckloads per month, possible well servicing, and routine maintenance.

Site-specific actions were agreed upon during the August 26, 2004 on-site visit and are included in the proposed action. Standard Conditions of Approval (COAs) are included as Attachment 2.

The estimated disturbance for the proposed action is approximately nine acres.

	<u>Dimensions</u>	<u>Acres</u>
Road Construction	1.8 miles x 16 ft	3.5
Road Reconstruction	2.2 miles x 16 ft	4.3
<u>Well pad</u>	200 X 250 ft	<u>1.1</u>
Total		8.9

Buck Mountain East 7.5' Quad
Newark Valley 1:100,000

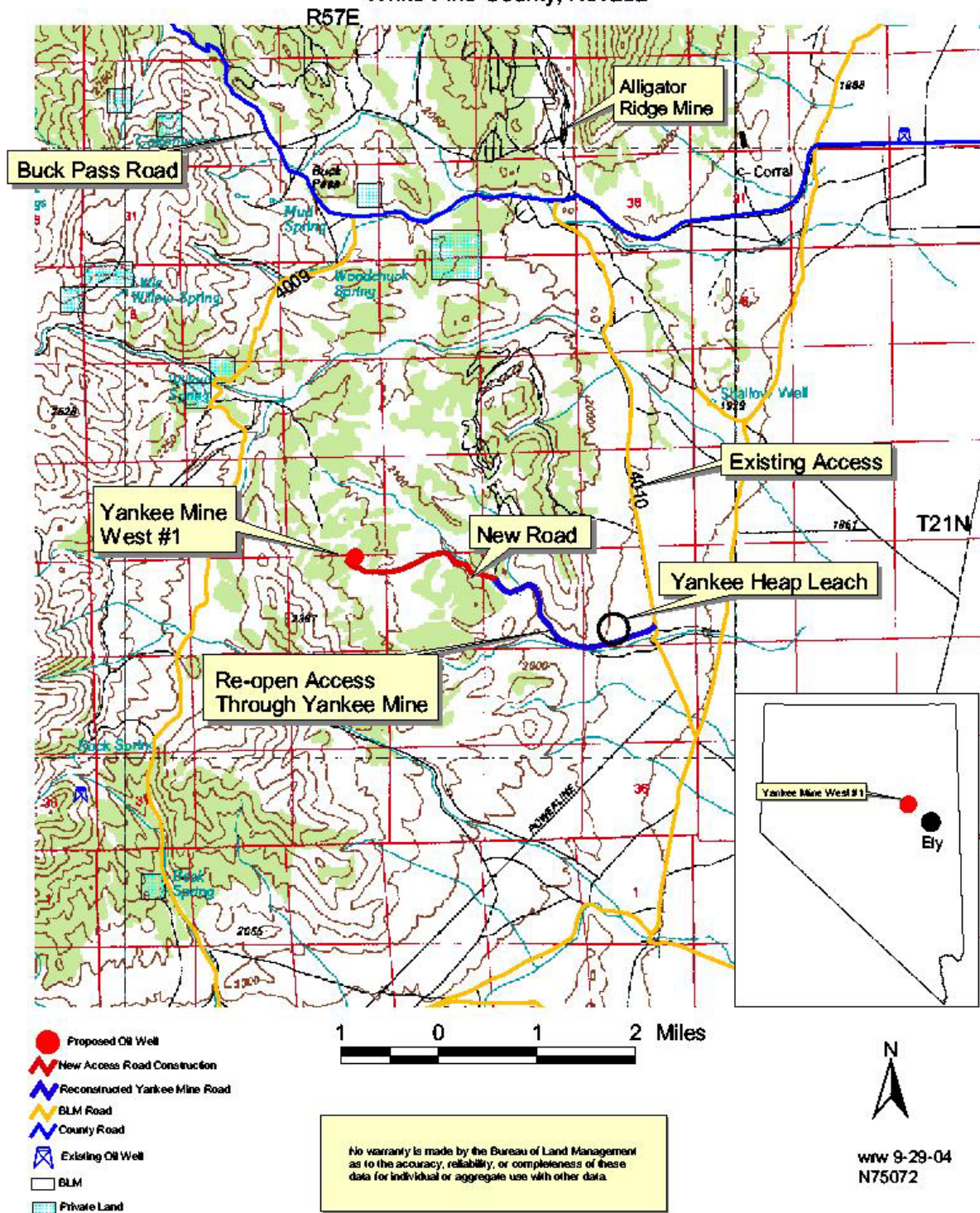
T21N, R57E, Sec. 21

Figure 1

Pioneer Oil and Gas

Yankee Mine West #1

White Pine County, Nevada



Operations commencing during the period May 1 to July 15 would be subject to the provisions of the Ely District policy management actions for the conservation of migratory birds. A qualified wildlife biologist would survey the area for nesting migratory birds. If any are found, operations would be postponed until after July 15.

Existing Roads and Access

The Yankee Mine West #1 well site can be reached from Ely, Nevada, by proceeding west on US Highway 50 for approximately 32 miles to Ruby Marsh/Long Valley Road, then right (north) on the paved road for 38 miles to the Alligator Ridge Mine, the end of the pavement. From there, go south five miles on the graveled road to the turnoff to the right (west) to the Yankee Mine. This was the main haulage road to the Yankee process area and open pit mines and has been reclaimed. Approximately 2.2 miles would be reopened through the mine area. Approximately 1.8 miles of new road would be constructed up the slope (west) to the Yankee Mine West #1 location. Both roads would be bladed to a running width of approximately 14 feet and average approximately 16 feet in total disturbance. There would be water turnouts and approximately two truck turnouts.

If the well is put into productions, the new 1.8 mile road would be upgraded to include additional erosion control features such as water bars and culverts. These roads would be maintained in the same or better condition as existed prior to the commencement of operations, and maintenance would continue until final abandonment and reclamation was completed.

Well Site Layout

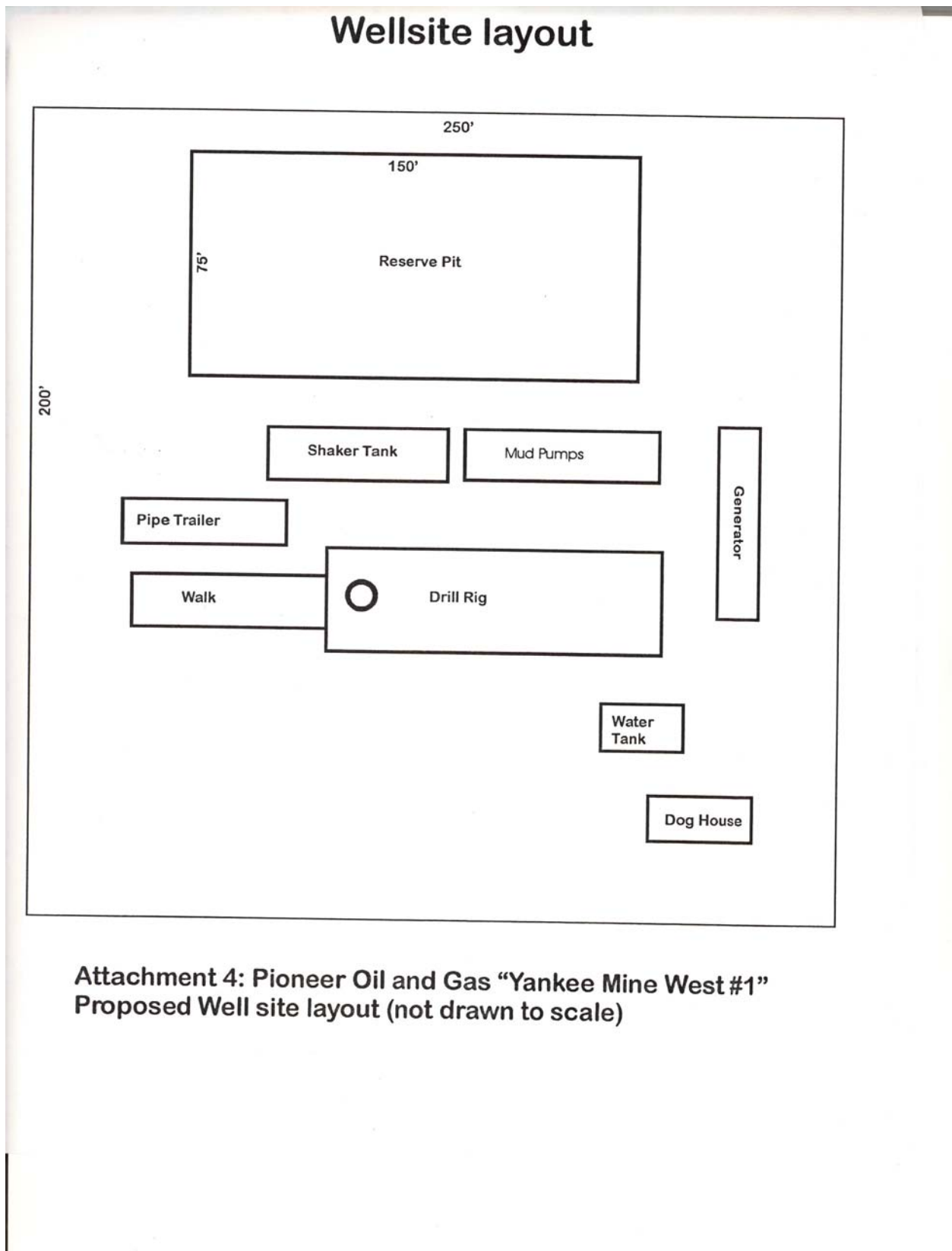
The Yankee Mine West #1 would be constructed on hilly terrain (Figure 2). All available topsoil, approximately the top 6 to 12 inches, would be stripped from the location and stockpiled for future reclamation. The pad would be leveled using material excavated from the reserve pit plus cuts and fills from the pad area itself.

No permanent living facilities would be constructed. Camper trailers would be brought on location during drilling operations, which would serve as temporary offices and housing for the drilling supervisor, mud loggers, and tool pusher.

The reserve pit would be designed to exclude surface runoff. It would not be lined since it would be impervious to the bentonitic drilling fluids. It would be fenced on the three exposed sides during operations to prevent wildlife and livestock from falling into the pit. Once drilling operations are completed, the fourth side would be fenced and remain fenced until final reclamation is initiated. Recommended fencing diagrams are shown in Attachment 3.

The dirt contractor would be provided with an approved copy of the surface use plan and stipulations for weed mitigation and prevention.

Figure 2 Well Pad Layout for Yankee Mine West #1



Water Source

Water would be trucked from a private source near the Yankee Mine facilities. Total water consumption for drilling the oil well is estimated to be about one to two acre feet.

Source of Construction Materials

On-site material is believed to be sufficient for construction. Should additional gravel be required, it would be obtained through a separate BLM gravel contract. Approved gravel sources on public lands are available in the vicinity of the project area and would be available for use.

Waste Materials

Drill cuttings and drilling fluids would be contained in the reserve pit. Pit walls would not be breeched so as to drain fluids to the surrounding surface.

Any spills of hydrocarbons from equipment on site would be promptly cleaned up and removed from the location in accordance with state and federal regulations.

All wastes that accumulate during the drilling operations would be contained in a trash cage or dumpster. Wastes would be removed periodically from the location and taken to an approved landfill. Burning would not be allowed on the well site. Chemical toilets with holding tanks would be utilized. All sewage would be disposed of in accordance with county and state regulations.

A Sundry Notice and Report on Wells (form 3160-5) would be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.

Location of Existing and/or Proposed Facilities if the Well is Productive

There are no existing production facilities within a one-mile radius of the proposed well. Producing wells in Railroad Valley and a refinery are located about 70 miles to the south.

If Yankee Mine West #1 were to be put into production, a Sundry Notice showing the location of tank batteries and production facilities would be submitted prior to operations. Facilities would be placed on the well site pad so that no additional disturbance would be necessary. Any production pits would be fenced to prevent wildlife entry. Production would be expected to last for several years.

Reclamation

Reclamation would begin concurrently with well site construction activities. Topsoil would be stockpiled along the edge of the drill pad. The stockpiles would be seeded immediately and again, if needed, during the first recommended seeding period (October 1 to March 15) with the interim seed mixture shown in Attachment 4. Available topsoil from the access road

construction would be similarly stockpiled and seeded.

Well abandonment and plugging would follow the procedures of 43 CFR 3162.3-4. If production were not established, the location and surrounding area would be cleaned of all material and debris. Any open holes would be backfilled and compacted from bottom to top immediately upon completion of drilling operations. The reserve pit would be completely fenced off and flagged on all four sides to prevent access by wildlife, wild horses, and livestock. Any oil spills remaining in the reserve pit after drilling operations would be removed prior to allowing pit drying to take place.

Once the reserve pit is dry, which normally takes one to two years, dirt work would commence. The reserve pit fence would be removed and the well pad and any other associated disturbed areas would be re-contoured to the approximate natural contours. Cuts and fills would be reduced to 3:1 slopes or less. Compacted soils within the disturbed areas would be broken up into a fine-grained seedbed by disking or any other generally accepted method of preparation. The stockpiled topsoil would be distributed over as much of the reclaimed area as possible. Seed from the recommended final seed mix (Attachment 5) would be planted on contour with a drill seeder or broadcast technique during the recommended seeding period of October 1 to March 15.

The newly constructed access route would be re-contoured, re-covered with any stockpiled topsoil, and seeded with the same seed mixture recommended for the well pad. Road reclamation would be done concurrently with the well site reclamation and follow the same procedures.

If a successful production well is established, the reserve pit and areas not needed for production would be reclaimed. Final reclamation would be deferred until production is completed and the well is plugged and abandoned.

Pioneer Oil and Gas would be bonded as required under 43 CFR 3104.

Noxious Weed Prevention

Pioneer Oil and Gas would be responsible for complete control of any noxious weeds identified within the project area during the life of this project. The proponent would be responsible for taking steps to mitigate the spread or increased densities of invasive weeds that result from implementation of the proposed action.

Pioneer Oil and Gas would implement the Ely Field Office Noxious Weed Prevention Schedule and SOPs for weed treatments, with special emphasis on the following actions. Prior to entering the site, all construction, drilling equipment, and vehicles would be washed down and cleaned to prevent the importation of noxious weed seeds from prior places of work. Vehicles would stay on roads and avoid driving through any weed patches. All seeds used in reclamation would be certified weed-free. Pioneer Oil and Gas would assist monitoring for noxious weeds during the life of the project until reclamation is complete.

Monitoring

Monitoring needed to assess reclamation success and continuing environmental stewardship would consist of periodic compliance inspections of the area during the life of the drilling operation by an authorized officer of the BLM. This monitoring would consist of checks on initial location of facilities, conformance to the APD and Conditions of Approval, and the status of any reclamation. Post-drilling compliance inspections would document, among other things, conformance with the proposed action, completion of earthworks of the reclamation plan, and monitoring for noxious weeds and vegetative success.

The No Action Alternative

The no action alternative, not to construct the oil and gas well pads and drill the wildcat well, is being analyzed in this EA in order to provide a baseline for comparison.

Other Alternatives Considered but not Analyzed in Detail

The access route to Yankee Mine West #1 was initially planned to follow, as much as possible, existing two-track and jeep trails. The on-site inspection showed that these were too steep and narrow to allow transport of the drill rig components to the proposed well site.

Other Alternatives

No other alternatives are necessary to respond to unresolved conflicts concerning alternative uses of available resources.

III. DESCRIPTION OF THE AFFECTED ENVIRONMENT WITH THE ASSOCIATED ENVIRONMENTAL CONSEQUENCES

Resources Not Present or not Affected by the Proposed Action

There would be no impacts to Special Status Species (Federally Listed, Threatened Or Endangered Species, Species Proposed For Federal Listing, State Protected Or Otherwise Sensitive Species); floodplains, wetlands and riparian areas; wilderness values; areas of critical environmental concern; wild and scenic rivers; prime or unique farmlands; cultural, paleontological and historical resource values; Native American religious concerns; or environmental justice.

No Special Status Species (Federally Listed, Threatened Or Endangered Species, Species Proposed For Federal Listing, State Protected Or Otherwise Sensitive Species) exist in the project area.

No Native American religious concerns were expressed by Tribal representatives during or after the monthly Tribal Coordination meetings.

Kautz Environmental Consultants conducted a class III cultural survey over the access routes and wellsite area in August and September, 2004. This survey found three isolated finds. These isolated finds are categorically exempt from the National Register of Historic Places, per the State protocol agreement between the BLM and the Nevada State Historic Preservation Office. Therefore the proposed action would have “no effect” on cultural, paleontological and historical resources. Techniques used in this survey were such that most cultural and paleontological resources existing in the project area visible to surface examination should have been found. If however, cultural or paleontological resources are subsequently discovered that could be adversely affected by project-related activities the Ely District Manager would be immediately informed.

Socio-Economic

Affected Environment

Eastern White Pine County is sparsely populated. Mines in the Buck Mountain and Bald Mountain areas have provided employment and tax revenues for White Pine County residents since the 1980s. Limited ranching occurs in Long Valley. Ely, Nevada is the closest town to the project area that offers supplies and services.

Environmental Consequences

Proposed Action

The proposed action would provide the local community with short-term employment opportunities over the duration of the drilling operation. Should the well be productive, a private corporation would make an economic use of the public lands and long-term employment opportunities would be available for a larger work force.

No Action Alternative

The local community would be deprived of this short term and potential future employment opportunity. This economic use of the public lands would not occur.

Soils and Vegetation

Affected Environment

Figure 3 shows the hilly topography and vegetation of the project site. Precipitation varies from 10” to 14” per year across the project area. The soils are a gravelly loam derived from underlying limestone, dolomite, andesite, and quartzite. Native vegetation is a black sage to mountain big sage community with abundant juniper and a few pinyon pine. Common plant species listed for the area are Indian ricegrass, needleandthread, bluebunch wheatgrass, and Thurber needlegrass.

Environmental Consequences

Proposed Action

Native vegetation has been successfully reestablished over a many of the reclaimed areas in the Yankee Mine and other mines in the Bald Mountain-Alligator ridge area. Success is always dependent on such factors as proper handling and re-spreading of stockpiled topsoil, amount of precipitation, and time of seeding. Productivity of the soil would also be lessened due to loss of the soil structure during construction and reclamation activities. There would be an immediate loss of as much as nine acres of vegetation for livestock, wild horses, and wildlife. If the well is plugged and abandoned and reclamation efforts are successful, vegetation may be restored within two to three years. Should the well be placed into production, this acreage would be unavailable for several additional years. The reclamation measures of the proposed action would be appropriate to reduce, as much as possible, the long-term impacts to vegetation.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Invasive, Non Native Species (Including Noxious Weeds)

Affected Environment

The Ely Field Office recognizes two categories of weeds, noxious and invasive. Noxious weeds are defined by the state of Nevada as "any species of plant which is, or is likely to be, detrimental or destructive and difficult to control or eradicate" (NRS555.005). Nevada state law (NRS 555) advises that the control of noxious weeds is the responsibility of every landowner or occupant.

Nevada Noxious weeds are shown in Attachment 6. Executive Order 13112, paraphrased, defines invasive weeds as any species whose introduction to a particular ecosystem, does or is likely to cause economic or environmental harm or harm to human health. Species such as halogeton, cheatgrass, tumbledustard, and Russian thistle are typically considered invasive.

A Weed Risk Assessment was completed for this project (Attachment 7). The overall risk was calculated as moderate based on BLM Manual 9015. No noxious weeds were found during pre-site inspections of August 26, 2004. However, black henbane, musk thistle, bull thistle, spotted knapweed, Russian knapweed, and whitetop have been inventoried elsewhere along the eastern edge of Buck Mountain. Cheat grass, halogeton, and Russian thistle (tumbleweed) have been observed in other previously disturbed locations throughout the region.

Environmental Consequences

Proposed Action

Noxious and invasive species may be introduced to the well site and access road areas as a result

of development and production activities. Also, the seeds of noxious and invasive species which

Figure 3a. Photo of Yankee Mine West #1 location looking southeast



Figure 3b looking east over area of the proposed access road from the Yankee Gold Mine.



may be present in the seed bank are expected to be favored by the proposed action and to increase in density and distribution as a result of the proposed action. Mitigation techniques would be used to moderate these effects.

No net increase in noxious weeds is expected as a result of this proposed action. Compliance with the prevention, monitoring, and eradication measures incorporated in the proposed action would reduce the likelihood of noxious weed introductions. Additionally, the project proponent would be responsible for eradication of all noxious weeds identified within the project area.

Increases in invasive weed density and distribution are expected as a result of this proposed action. The density of invasive plants typically increases on newly disturbed areas because the seeds of invasive plants are already present in the seed bank, and because the seeds of invasive plants are favored by disturbance. Additionally, the seeds of invasive plants may be introduced to the site as part of the disturbance. Compliance with the prevention, monitoring, and eradication measures incorporated in the proposed action would reduce the likelihood of invasive weed introductions. Seeding desirable species would decrease the competitive advantage of invasive species. Based on the appearance of nearby reclaimed mine sites, it is likely that revegetation efforts would be moderately successful. If reclamation objectives are completely met over time, the risk of weed establishment would diminish to approximately pre-development levels.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Visual Resources Management (VRM)

Affected Environment

The proposed project is located within a remote, uninhabited, portion of White Pine County which, though unclassified, meets the criteria for a Class IV Visual Resource Management (VRM) zone. The objective for the class IV zone is to allow change, even dominant change, but to mitigate the change as well as possible.

Environmental Consequences

Proposed Action

The wellsite and drilling operation would be difficult to see from any traveled roads in the area. Portions of the 1.9 mile-long constructed access road could be seen from the County road in Long Valley. The contrasting visual effects of vegetation removal and reclamation would be noticeable for many years.

No Action Alternative

Under the No Action Alternative, impacts as described above would not occur.

Wild Horses and Burros

Affected Environment

The project area is within the Buck and Bald Wild Horse Herd Management Area (HMA). The HMA is 838,700 acres in size and current estimated population is 620 wild horses.

Environmental Consequences

Proposed Action

The temporary loss of nine acres of vegetation would have little impact on any wild horses or burros that may stray into the project area. Drilling water and other fluids would be fenced or otherwise contained to prevent access by wild horses. Should the well be placed into production, the loss of acreage and periodic vehicle traffic would occur for several years.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Wildlife

Affected Environment

The area of the proposed drilling project is yearlong deer and elk habitat but contains no key/critical habitats for these species. Bald Eagles winter in the Buck Mountain/Long Valley region. There are no sage grouse leks or seasonal use areas. Operations commencing during the period of May 1 to July 15 would be subject to the Ely District policy management actions for the conservation of migratory birds. There is no other known wildlife or wildlife habitat in the project area for which timing limitations would be appropriate for the proposed action.

Environmental Consequences

Proposed Action

Wildlife activity would be disrupted by noise, vehicular traffic, drilling operations, and the loss of as much as nine acres of vegetation during the one or more months of drilling and earthworks. Drilling water and other fluids would be fenced or otherwise contained to prevent access by wildlife. Should the well be productive, periodic disruptions and the loss of vegetation would probably last for several years. Once the well is plugged and abandoned, whether immediately or after production, disruptions would cease and reclamation would eventually restore vegetation to its pre-project status.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Livestock Grazing

Affected Environment

Yankee Mine West #1 is located within the Warm Springs grazing allotment.

Environmental Consequences

Proposed Action

There would be an immediate loss of nine acres of range within the project area during as many as three years of drilling and reclamation activities. Should the well be placed in production, this loss of acreage would last for several years. Revegetation efforts are expected to be moderately successful (soils and vegetation section, above) so that over time, native vegetation could be re-established. There are no anticipated conflicts between rangeland resources and the proposed action.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Water Quality (Drinking/Ground)

Affected Environment

There are no water wells or springs within one mile of Yankee Mine West #1. The nearest water well is located three miles east of the proposed oil well at the Yankee mine. Several springs occur higher up on Buck Mountain two or more miles northwest of the proposed oil well. These are used primarily for livestock watering, as well as by wild horses and wildlife.

Environmental Consequences

Proposed Action

The proposed action would not affect any existing drinking water sources within the region of the proposed action. There would be a local, short-term drawdown of water in the immediate vicinity of the Yankee Mine water well. Total water consumption is estimated to be about one to two acre feet. Most of the water would be re-injected into the oil well itself as make-up water while drilling. There would be some net loss due to surface use and evaporation from the reserve pit.

The bentonitic composition of the drilling mud would seal off the reserve pit so that fluids would not be able to intermix with and possibly degrade near-surface groundwater. Federal and State

water regulations prevent downhole contamination of groundwater in proposed oil well.

No Action Alternative

Under the no action alternative, no impacts would occur.

Wastes, Hazardous and Solid

Affected Environment

No solid or liquid hazardous wastes presently occur on either site.

Environmental Consequences

Proposed Action

Caustic soda would be added to the drilling fluid in small amounts in order to control the pH of the fluid. The drilling fluid, itself, consists of mostly water, bentonite, lost circulation materials such as paper and wood products, and the fine fraction of the drill cuttings. It is not toxic, either as a fluid or when dried and mixed with drill cuttings in the reserve pits. This fluid would be contained within the reserve pit and, upon completion of drilling, allowed to dry, then covered with stockpiled fill and topsoil, and seeded. Unused additives would be hauled off site during rig demobilization.

Petroleum products are also used. Hydrocarbon spills would be cleaned-up according to protocols regulated by the Nevada Division of Environmental Protection (NRS 445A).

No other hazardous wastes would be generated. Solid wastes would be disposed of properly in accordance with the standard Conditions of Approval.

The precautions and mitigating measures in the proposed action are adequate to prevent impacts from wastes, hazardous and solid.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

Air Quality

Affected Environment

Periodic degradation of air quality occurs due to winds blowing dust from nearby areas and occasional regional air pollution.

Environmental Consequences

Proposed Action

There would be a localized, inconsequential increase of dust levels as a result of construction activities and vehicle use. Wind blown dust from these exposed areas could cause a temporary degradation in air quality. Nevada State Air Quality standards would apply to this operation, and the operator would be required to apply water for dust abatement if the problem was above a threshold level as stated in the standards. Following reclamation of the site and successful revegetation, the local air quality would return to pre-operation conditions. Should the well be placed in production, dust would be generated by periodic vehicle traffic for several years.

No Action Alternative

Under the no action alternative, impacts as described above would not occur.

IV. CUMULATIVE IMPACTS

Cumulative impacts are discussed in the Egan Resource Management Plan (RMP) Proposed Oil and Gas Leasing Amendment and Final Environmental Impact Statement, August 1993, pp. 4-31 through 4-43. Typical oil and gas activities, including exploration, wildcat drilling, production and field development, and abandonment, are described in Appendix A of that document and are incorporated by reference into this environmental analysis. No additional analysis is necessary to address cumulative impacts for the proposed action.

Resources that were identified in the document as potentially being affected in a cumulative sense consist of wildlife habitat, woodland products, cultural resources, recreational and visual resources, livestock and vegetation, wild horses and burros, soils and air quality. There would be little to no impacts to these resources from the proposed action.

The reasonable development scenario for the Egan Resource Area assumed that 175 wells would be drilled during the life of the plan and that only 10% of these would be producers. Approximately 26 wells have been drilled in the area analyzed in the Egan RMP since 1993. None have been producers.

V. PROPOSED MITIGATING MEASURES

The preventative measures and procedures of the proposed action and the attached Conditions of Approval (Attachment 2) are adequate to mitigate adverse effects to the human environment. No additional mitigating measures are proposed as a result of the impact analysis.

VI. SUGGESTED MONITORING

The monitoring measures included in the proposed action are sufficient to ensure mitigation of the potential impacts described above. No additional monitoring measures are proposed as a result of the impact analysis.

VII. CONSULTATION AND COORDINATION

Intensity of Public Interest and Record of Contacts

There is general public interest in this type of potential development. The proposed action was discussed with representatives of the Duckwater Shoshone Tribal representatives on August 20, 2004. The Applications for Permit to Drill (APD) and Sundry Notices were posted at the Nevada BLM State Office upon receipt. Notification of the EA was posted on the Ely Field Office website on September 17, 2004 (http://www.nv.blm.gov/ely/nepa/ea_list.htm). Letters requesting comments for inclusion in the EA were mailed to the Western Watersheds Project, Duckwater Shoshone Tribe, Nevada Division of Wildlife, and the White Pine County Commission on September 17, 2004. No comments have been received.

Record of Internal District Review

Karen Prentice	Invasive, Non-Native Species
Ryan Pitts	Range
Jody Nartz	Wild Horses and Burros
Nathan Thomas	Cultural Resources
Steve Leslie	Visual Resource/Wilderness
Lynn Bjorklund	Reclamation
Paul Podborny	Wildlife, Migratory Birds, Special Status Plants, Special Status Animals
Elvis Wall	Native American Consultation
Susan Baughman	Environmental Coordinator

Attachment 1. Application for Permit to Drill

The APD is available for review from the Ely Field Office of the BLM at:

HC33 Box 33500
Ely, Nevada 89301

Or by e-mail from William_Wilson@nv.blm.gov

Attachment 2. Conditions of Approval (COAs)

Application for Permit to Drill (APD) and Sundry Notices

The regulations governing drilling operations on public lands are stated in 43 CFR 3260. With submittal of an APD or Sundry Notice by the operator or lessee, the following conditions of approval will be required for the operation as applicable.

Pre-Construction

1. Existing roads should be used to the extent possible. Additional roads, if needed, shall be kept to an absolute minimum and the location of routes must be approved by the AO prior to construction.
2. Upon determination of an impending field development, a transportation plan will be requested to reduce unnecessary access roads.
3. All access roads will be constructed and maintained to BLM road standards (BLM Manual Section 9113).
4. Off-road travel will be restricted to terrain with less than 30 percent slopes unless approved by the AO.
5. Proposed surface disturbance and vehicular travel will be limited to the approved well location and access route.
6. Any changes in well location, facility location, access, or site expansion must be approved by the AO in advance.
7. Prior to approval of an APD or other lease operations, a Section 106 consultation must be completed by the AO as provided for under the Nevada BLM Programmatic Agreement for Cultural Resources.
8. Any activity planned within a ¼-mile on either side the Pony Express National Historic Trail must undergo a visual assessment. Appropriate mitigation of visual impacts will be implemented as necessary to keep the management corridor in as natural a condition as possible.

Well Pad and Facility Construction

1. Every pad, access road, or facility site must have an approved surface drainage plan.
2. A site diagram depicting the location of production facilities, recontoured slopes and stabilization measures shall be approved by the AO prior to installation of production facilities.

3. Drainage from disturbed areas will be confined or directed so that erosion of undisturbed areas is not increased. In addition, no runoff water (including that from roads) will be allowed to flow into intermittent or perennial waterways without first passing through a sediment-trapping mechanism. Erosion control structures may include: water bars, berms, drainage ditches, sediment ponds, or devices.
4. Access road construction for exploratory wells should be planned such that a permanent road can later be constructed in the event of field development.
5. Construction of access roads on steep hillsides and near watercourses will be avoided where alternate routes provide adequate access.
6. Access roads requiring construction with cut and fill will be designed to minimize surface disturbance and take into account the character of the landform, natural contours, cut material, depth of cut, where the fill material will be deposited, resource concerns, and visual contrast.
7. Fill material will not be cast over hilltops or into drainages. Cut slopes should normally be no steeper than 3:1 and fill slopes no steeper than 2:1.
8. Low water crossings should be used whenever possible. Installation of culverts, if necessary, will be designed to maintain the original stream gradient and will be of adequate size to accommodate a 24-hour 100-year event. Fill material will be properly compacted in layers not exceeding 6 inches in thickness to insure stability and to prevent washing out or dislocation of the culvert. The road surface should not be less than 12 inches above the culvert to prevent crushing from weight loads.
9. As required, fill slopes surrounding culverts will be riprapped with a well-graded mixture of rock sizes containing no material greater than two feet or smaller than three inches. The ratio of maximum to minimum dimension of any rock shall not exceed 6:1.
10. Water turnouts needed to provide additional drainage will be constructed not to exceed two percent slope to minimize soil erosion.
11. Well site layout should take into account the character of the topography and landform. Deep vertical cuts and steep long fill slopes should be avoided. All cut and fill slopes should be constructed to the least percent slope practical.
12. Trash will be retained in portable trash cages and hauled to an authorized disposal site for disposal. Burning will not be allowed on the well site.
13. No drilling or storage facilities will be allowed within 500 feet of any pond, reservoir, canal, spring, or stream. Other protective areas near water may be required to protect riparian habitat and special status species.
14. Spring and water developments on public lands may be used only with the prior written

approval of the AO or the water rights holder.

15. To maintain aesthetic values, all semi-permanent and permanent facilities will be painted to blend with the natural surroundings. The Standard Environmental Colors will be used for color selection. Fences shall be made of non-reflective materials.
16. Fences shall not be cut without prior approval of the AO. Before cutting any fences, the operator shall firmly brace the fence on both sides of the cut; a temporary gate will be installed for use during the course of operations unless the fence is immediately repaired. Upon completion of operations, fences shall be restored to at least their original condition.
17. As directed by the AO, cattle guards will be installed whenever access roads are through pasture gates or fences. These cattle guards shall be maintained. This includes cleaning out under cattle guard bases when needed.
18. The depth of surface soil material to be removed and stockpiled will be specified by the AO. If topsoil is stockpiled for more than one year, the stockpile shall be seeded or otherwise protected from wind and water erosion. The stockpile shall be marked or segregated to avoid loss or mixing with other subsurface materials. Any trees removed will be separated from soils and stockpiled separately.
19. Mud, separation pits, and other containments used during the exploration or operation of the lease for the storage of any hazardous materials shall be adequately fenced, posted, and/or covered.
20. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the AO. Within five working days the AO will inform the operator as to whether:
 - a. the materials appear eligible for the National Register of Historic Places
 - b. the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary)
 - c. a timeframe for the authorized officer to complete an expedited review under 36 CFR 800.11 or other applicable Programmatic Agreement, to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate
21. If the operator wishes, at any time, relocate activities to avoid the expense of mitigation and/or the delays associated with the process described in item 20 above for inadvertent discovery of cultural resources, the authorized officer will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The authorized officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the authorized officer that the required mitigation has been completed, the operator will then be

allowed to resume construction.

22. Bald eagle roosts, peregrine falcon hawk sites and known occupied raptor aeries (nests) will be avoided during the nesting and fledging period.
23. Field development construction activities within ½-mile of a sage grouse lek will require motorized equipment to have noise abatement devices to preclude excessive noise during the sage grouse strutting period.
24. The cutting of rare, unique or unusual trees will not be permitted. In particular cutting of Bristlecone pine, Swamp Cedar, Ponderosa pine, and White Fir will be avoided.
25. Consultation with the U.S. Fish and Wildlife Service (FWS) is required per section 7 of the Endangered Species Act prior to approval of an APD or other lease operations if any proposed listed or listed threatened or endangered species or its critical habitat is likely to be affected by project activities. If there is deemed to be any adverse impact, the proposal will be modified or the request denied.
26. Actions that will adversely impact a special status species will be modified.
27. Fences shall be flagged with bright colored flagging at least every rod for visibility to wild horses. All fences should be constructed using green steel posts with white or silver tops to increase visibility. Fences should also avoid obvious horse migration routes (deep trails, stud piles) if at all possible.
28. No access roads, drill pads, mud pits or storage facilities will be allowed within 200 meters of cave entrances, drainage areas and subsurface passages. No waste material or chemicals will be placed, or disposed of, in sinkholes or gates during specified time frames by cave entrances. If during construction activities any sinkholes or cave openings are discovered, construction activities will cease and the AO will be notified.
29. The discharge of dredged or fill material into surface waters such as navigable and interstate waters and their tributaries, wetlands adjacent to those waters and all impoundments of those waters may require an individual permit or notification under Section 404 of the Clean Water Act (CWA) issued by the District Engineer (DE) of the Corps of Engineers (COE). Criteria applied under Section 404 is established in regulation and will be used to determine the type of permit or notification required.

Field Operation

1. Operations shall be done in a manner that prevents damage, interference, or disruption of water flows, and improvements associated with all springs, wells, or impoundments. It is the operator's responsibility to enact the precautions necessary to prevent damage, interference, or disruptions.
2. Companies controlling roads that provide access into crucial wildlife areas may be required

to close the road with a lockable gate to prevent general use of the road during critical periods of the year when resource problems are experienced (during hunting seasons, winter, etc.). This restrictive measure will be applied where needed to protect wildlife resources or to minimize environmental degradation.

3. The use of closed road segments will be restricted to legitimate, authorized agents of the lessee and/or their subcontractor(s), the land managing agency, and other agencies with a legitimate need (NDOW, other law enforcement agencies, etc.).
4. Unauthorized use or failure to lock gates during specified time frames by the lessee or its subcontractors will be considered a violation of the terms of the APD or associated grants.
5. The operator shall regularly maintain all roads used for access to the lease operation. A maintenance plan may be required. A regular maintenance program may include, but not be limited to, upgrading of existing roads, blading, ditching, culvert and drainage installation, and graveling or capping of roadbed.
6. Noxious weeds that may be introduced due to soil disturbance and reclamation will be treated by methods to be approved by the AO. These methods may include biological, mechanical, or chemical. Should chemical methods be approved, the lessee must submit a Pesticide Use Proposal to the AO 60 days prior to the planned application date.

Reclamation and Abandonment

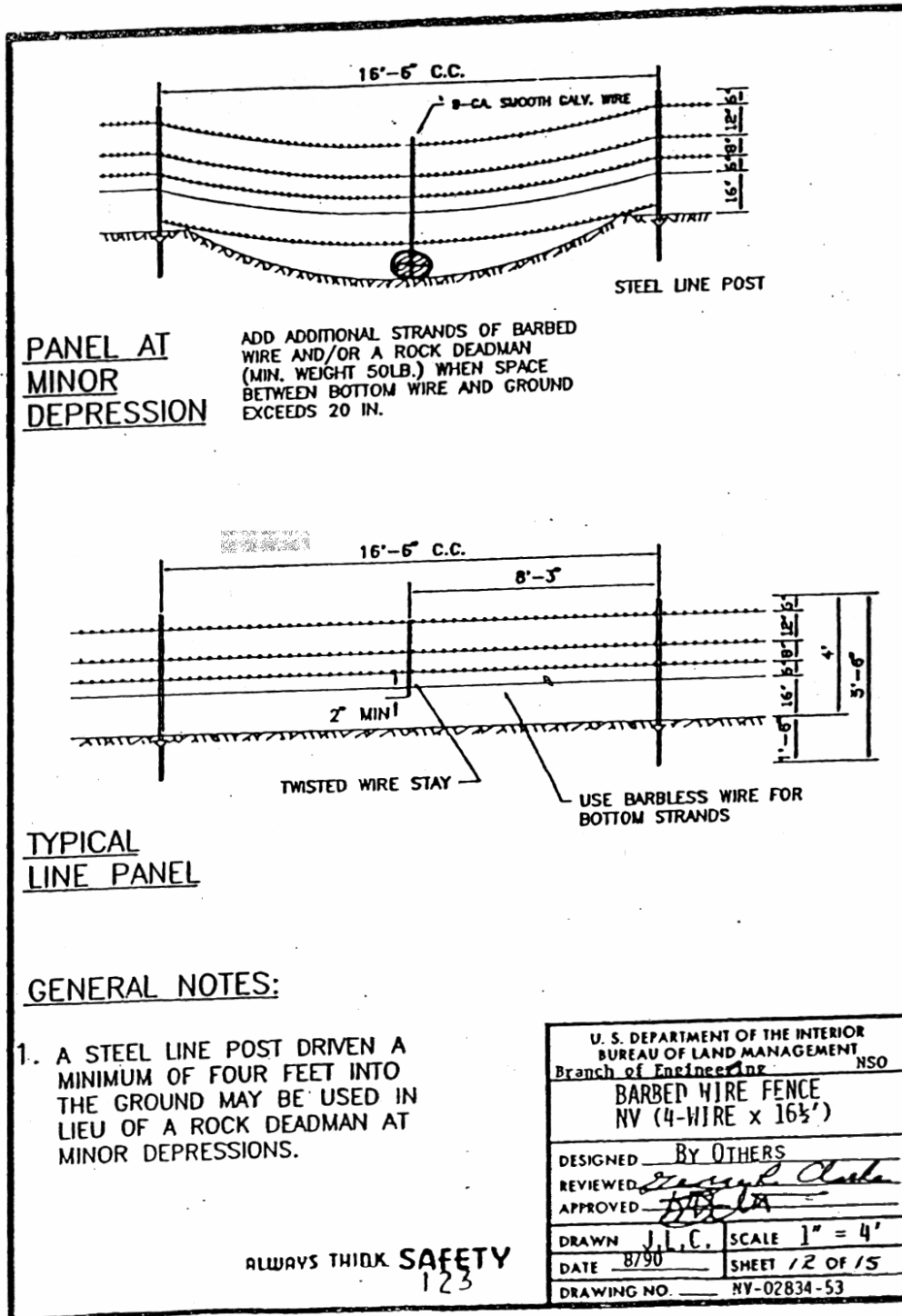
1. A water well may be accepted by the Ely District upon completion of operations. Please submit the following information to the Ely District Office, Bureau of Land Management, HC 33, Box 33500, Ely, NV 89301-9408:
 - a. Profile 1 Water Analysis
 - b. Type of inside diameter of casing used in well
 - c. Total depth of well
 - d. Depth of concrete seal
 - e. Depth of static water level
 - f. Water bearing formation or description of aquifer
2. The operator or contractor will contact the AO 48 hours prior to reclamation work.
3. Restoration work may not begin on the well site until the reserve pits are completely dry.
4. Disturbed areas will be recontoured to blend as nearly as possible with the natural topography prior to revegetation. This includes removing all berms and refilling all cuts.

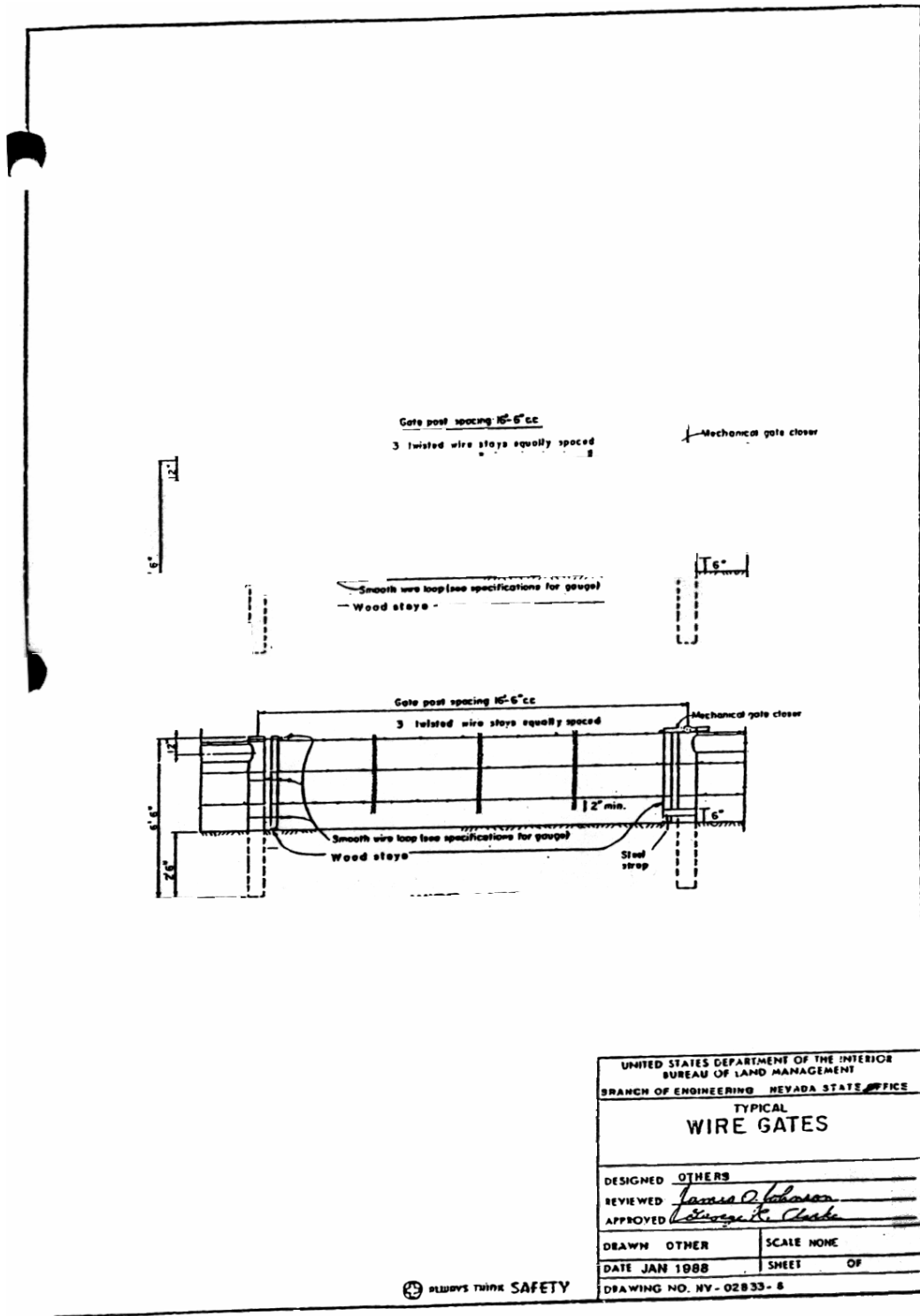
Compacted portions of the pad will be ripped to a depth of 12 inches unless in solid rock.

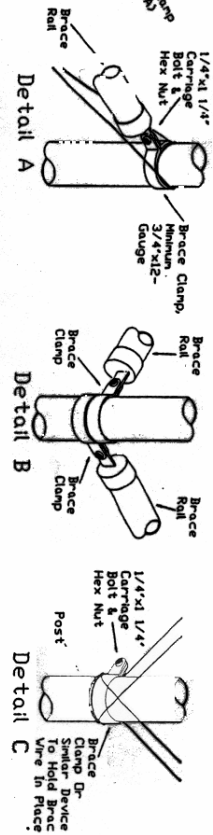
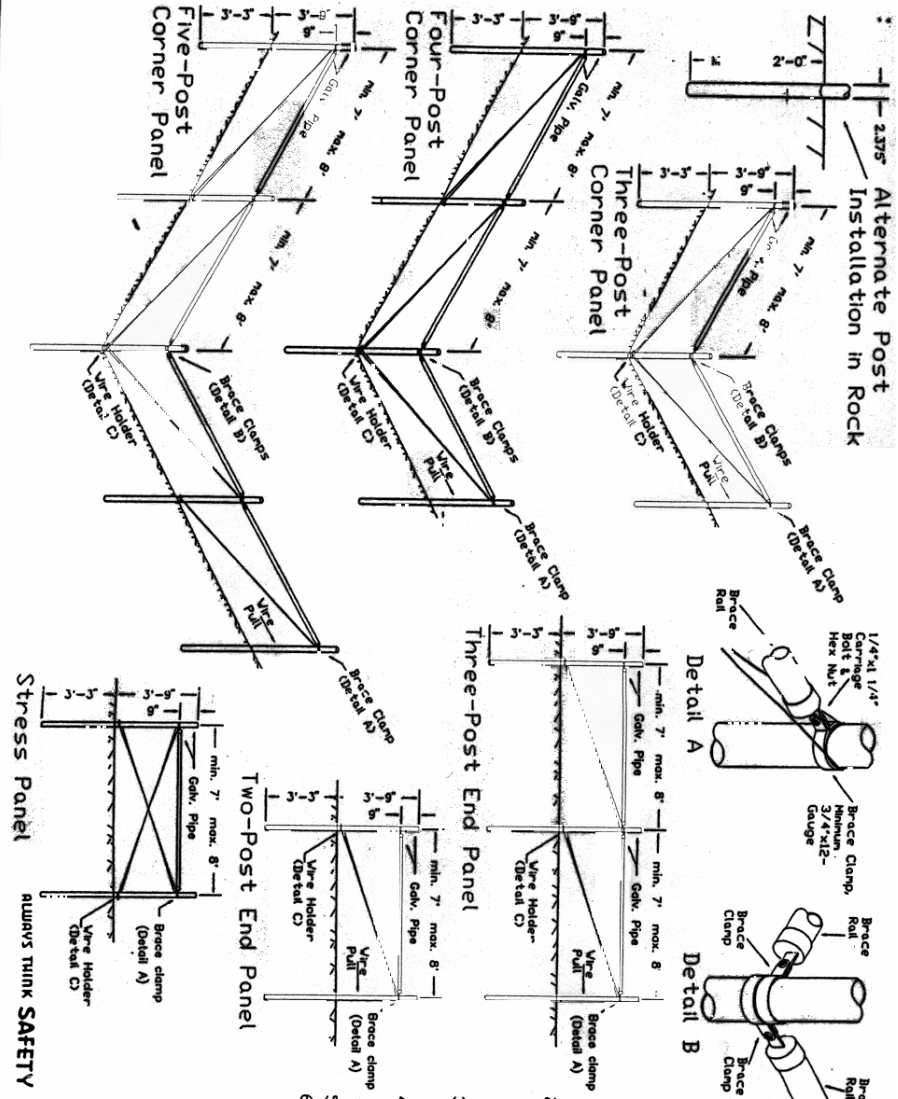
5. Site preparation for reclamation may include contour furrowing, terracing, reduction of steep cut and fill slopes, and the installation of water bars, etc.
6. All portions of the access roads not needed for other uses as determined by the AO will be reclaimed.
7. The stockpiled topsoil will be spread evenly over the disturbed area.
8. The operator will be required to construct water bars and re-open drainages on abandoned access roads and pipeline routes to minimize erosion as required. Water bars will be spaced appropriately dependent upon topography and slope. Pipeline routes shall be water-barred perpendicular to the fall-line of the slope.
9. The area is considered to be satisfactorily reclaimed when all disturbed areas have been recontoured to blend with the natural topography, erosion stabilized and an acceptable vegetative cover has been established. The Nevada Guidelines for Successful Revegetation for the Nevada Division of Environmental Protection, the Bureau of Land Management and the U.S.D.A Forest Service (attached as part of the SPPs/COAs) will be used to determine if revegetation is successful.
10. Rehabilitation shall be planned on the sites of both producing and abandoned wells. The entire site or portion thereof, not required for the continued operation of the well, should be restored as nearly as practical to its original condition. Final grading of back-filled and cut slopes will be done to prevent erosion and encourage establishment of vegetation.
11. Petroleum products such as gasoline, diesel fuel, helicopter fuel, crankcase oil, lubricants, and cleaning solvents used to fuel, lubricate, and clean vehicles and equipment will be containerized in approved containers.
12. Hazardous material shall be properly stored in separate containers to prevent mixing, drainage, or accidents. Hazardous materials shall not be drained onto the ground or into streams or drainage areas.
13. Totally enclosed containment shall be provided for all solid construction waste including trash, garbage, petroleum products, and related litter will be removed to an authorized sanitary landfill approved for the disposal of these classes of waste.
14. All construction, operation, and maintenance activities shall comply with all applicable Federal, State, and local laws and regulations regarding the use of hazardous substances and the protection of air and water quality.
15. In construction areas where recontouring is not required, vegetation will be left in place wherever possible and the original contour will be maintained to avoid excessive root damage and allow for resprouting.

16. Watering facilities (e.g. – tanks, developed springs, water lines, wells, etc.) will be repaired or replaced if they are damaged or destroyed by construction activities to its predisturbed condition as required by the AO.
17. Mulching of the seed-bed following seeding may be required under certain conditions (i.e. – expected severe erosion), as determined by the AO.
18. Seed will be broadcast between October 1 and March 15 using a site-specific seed mixture and depth of planting as determined by the AO. Seed may be applied with a rangeland drill at half the rate of broadcast seeding. All seeding application rates will be in pounds of pure live seed per acre. Seed should be adapted varieties.

Attachment 3. Fencing Diagrams







General Notes:

1. Brace wire shall be wrapped two times around the post and secured with a wire nut. The brace wires will then be twisted tight.
2. The Posts and Braces shall be as specified and of the following sizes:
Post Pipe: 2" Schedule 40 (2.375" O.D., 3.65 lbs./ft.)
Brace Pipe: 1/4" Schedule 40 (0.660" O.D., 0.27 lbs./ft.)
3. Wire spacing shall be as specified in the design and gate specifications. Wires shall be twisted tight.
4. The Contracting Officer will determine where to use the Alternate Post Installation in Rock. An undersized hole must be drilled in the rock for this installation.
5. All fittings and tie wire shall be galvanized.
6. With the approval of the Contracting Officer, other methods may be substituted for the clamp for holding down the brace wire.

U. S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT BRANCH OF ENGINEERING, NEVADA STATE OFFICE			
STEEL PIPE PANELS			
DESIGNED BY OTHERS	SCALE 1" = 4'		
REVIEWED BY <i>[Signature]</i>			
APPROVED BY <i>[Signature]</i>			
DRAWN BY J.L.C.			
DATE 8/21/90			
DRAWING NO. NV-02834(61)			

Attachment 4 Interim Seed Mixture

Stabilization and Weed Competitive Seed Mix for Yankee Mine West #1

<u>Species</u>	<u>Seeds/Lb</u>	<u>Seed rate</u> lbs/ac	<u>Seeds/sq ft</u>
Bluebunch wheatgrass (Agropyron spicatum)	154,000	3.0	10
Cereal rye (Secale cereale)	18,000	40	16
Basin wildrye (Elymus cinereus)	130,000	1	3
<hr/>			
Total		44.1 lbs/ac	29 seeds/sq ft.

Substitutions can be made depending on seed price and availability. Contact the BLM if substitutions are required.

* Seed rate - Adjust listed pounds/acre for pure live seed.

Pure Live Seed pounds/acre = $\frac{\text{Seed rate (listed above lbs/acre)}}{(\% \text{germination}) (\% \text{purity})}$

Attachment 5 Final Seed Mixture

	Seed Rate lbs/acre (PLS)
bluebunch wheatgrass v. secar <i>Agropyron spicatum</i>	3.0
thickspike wheatgrass v. critana <i>Agropyron dasystachyum</i>	3.0
western wheatgrass v. rosana <i>Agropyron smithii</i>	3.0
Canby bluegrass v. canbi <i>Poa canbyi</i>	1.0
Indian ricegrass v. nezpar <i>Oryzopsis hymenoides</i>	2.0
Basin wildrye <i>Elymus cinereus</i>	1.0
Fourwing saltbush <i>Atriplex canescens</i>	2.0
Antelope bitterbrush <i>Purshia tridentata</i>	1.0
Black Sagebrush <i>Artemisial nova</i>	0.05
blue flax v. appar <i>Linum lewisii</i>	0.5
Palmer penstemon <i>Penstemon palmeri</i>	0.1
small burnett <i>Sanguisorba minor</i>	1.0
Forage kochia <i>Kochia prostrata</i>	1.0
Crested Wheatgrass <i>Agropyron cristatum</i>	3.0
Total - BMM Mixture	21.7

Substitutions can be made depending on seed price and availability. Contact the BLM if substitutions are required.

* Seed rate - Adjust listed pounds/acre for pure live seed.

Pure Live Seed pounds/acre = $\frac{\text{Seed rate (listed above lbs/acre)}}{(\% \text{germination}) (\% \text{purity})}$

Attachment 6 Nevada Noxious Weed List

NEVADA NOXIOUS WEED LIST		
Common Name	Latin Name	Other Name(s)
Austrian fieldcress	<i>Rorippa austriaca</i>	Swaisionpea
Austrian peaweed	<i>Sphaerophysa salsula</i>	
Black henbane	<i>Hyoscyamus niger</i>	
Camelthorn	<i>Alhagi pseudalhagi</i>	<i>A. camelorum</i>
Canada thistle	<i>Cirsium arvense</i>	
Carolina Horsenettle	<i>Solanum carolinense</i>	
Common crupina	<i>Crupina vulgaris</i>	
Common St. Johnswort	<i>Hypercium perforatum</i>	Goatweed; Klamath weed
Dalmation toadflax	<i>Linaria genistifolia</i> <i>ssp. dalmatica</i>	
Diffuse knapweed	<i>Centaurea diffusa</i>	
Dyer's woad	<i>Isatis tinctoria</i>	
Hoary cress	<i>Cardaria draba</i>	whitetop
Houndstongue	<i>Cynoglossum officinale</i>	
Iberian starthistle	<i>Centaurea iberica</i>	
Johnsongrass	<i>Sorghum halepense</i>	Perennial sorghum
Leafy spurge	<i>Euphorbia esula</i>	
Mediterranean sage	<i>Salvia aethiopis</i>	
Medusahead	<i>Taeniatherum caput-medusae</i>	Medusahead rye
Musk thistle	<i>Carduus nutans</i>	
Perennial pepperweed	<i>Lepidium latifolium</i>	Tall whitetop
Perennial sowthistle	<i>Sonchus arvensis</i>	
Poison Hemlock	<i>Conium maculatum</i>	

NEVADA NOXIOUS WEED LIST		
Common Name	Latin Name	Other Name(s)
Puncturevine	<i>Tribulus terrestris</i>	
Purple loosestrife	<i>Lythrum salicaria</i>	Purple lythrum
Purple starthistle	<i>Centaurea calcitrapa</i>	
Rush skeletonweed	<i>Chondrilla juncea</i>	
Russian knapweed	<i>Centaurea repens</i>	
Saltcedar	<i>Tamarix ramosissima</i>	Tamarisk
Scotch thistle	<i>Onopordum acanthium</i>	
Silverleaf nightshade	<i>Solanum elaeagnifolium</i>	White horsenettle
Spotted knapweed	<i>Centaurea maculosa</i>	
Squarrose knapweed	<i>Centaurea virgata</i> <i>ssp. squarrosa</i>	
Sulfur cinquefoil	<i>Potentilla recta</i>	
Yellow starthistle	<i>Centaurea solstitialis</i>	
Yellow toadflax	<i>Linaria vulgaris</i>	butter and eggs
Waterhemlock	<i>Cicuta ssp.</i>	
Western waterhemlock	<i>Cicuta douglasii</i>	
Wild licorice	<i>Glycyrrhiza lepidota</i>	American licorice

Attachment 7

RISK ASSESSMENT FOR NOXIOUS WEEDS

Pioneer Oil and Gas Yankee Mine West #1

On September 29, 2004, a Noxious Weed Risk Assessment was completed for a proposed oil and gas well, Yankee Mine West #1, for Pioneer Oil and Gas. The project, located within the Warm Springs Allotment, White Pine County, Nevada, T21N, R57E, sections 21 and 22, consists of:

	<u>Dimensions</u>	<u>Acres</u>	
Road Construction	1.8 miles x 16 ft	3.5	
Road Reconstruction	2.2 miles x 16 ft	4.3	
<u>Well pad</u>	200 X 250 ft	<u>1.1</u>	Total
		8.9	Acres

The total project surface disturbance would be nine acres. A field reconnaissance was conducted on August 26, 2004 and the Ely Field Office weed survey data was consulted. The project area is within a BLM weed surveyed area.

Factor 1 assesses the likelihood of noxious weed species spreading to the project area.

For this project, the factor rates as Moderate (4) at the present time. No noxious weeds were identified during the on-site inspection of August 26. No noxious weeds are shown on the BLM noxious weed survey map within the project area. Noxious weeds, however have been surveyed along roads and near springs as close as two miles from the well site.

None (0)	Noxious weed species not located within or adjacent to the project area. Project activity is not likely to result in the establishment of noxious weed species in the project area.
Low (1-3)	Noxious weed species present in areas <u>adjacent to but not within the project area. Project activities can be implemented and prevent the spread of noxious weeds into the project area.</u>
Moderate (4-7)	Noxious weed species <u>located immediately adjacent to or within the project area. Project activities are likely to result in some areas becoming infested with noxious weed species even when preventative management actions are followed.</u> Control measures are essential to prevent the spread of noxious weeds within the project area.
High (8-10)	<u>Heavy infestations of noxious weeds are located within or immediately adjacent to the project area. Project activities, even with preventative management actions, are likely to result in the establishment and spread of noxious weeds</u> on disturbed sites throughout much of the project area.

Factor 2 assesses the consequences of noxious weed establishment in the project area.

For this project, the factor rates as Moderate (5). This means that drilling operations can disturb and may cause some noxious weed infestation of the proposed **nine acres**.

Mitigation: The project operations will be conducted in compliance with the Ely District Noxious Weed Schedules. The following scheduled procedures can significantly and effectively reduce noxious weed introduction into the project area:

- All vehicles and all other project equipment will be cleaned and inspected prior to entering public land and prior to entering all subsequent project areas. Cleaning and

inspection of the vehicles and equipment will occur in private facilities located on private land. The cleaning will concentrate on the undercarriage, with special emphasis on axels, frame, cross members, motor mounts, and on underneath steps, running boards, and front bumper/brush guard assemblies. Vehicle cabs will be swept out with refuse and disposed of in waste receptacles.

- Work areas will be reseeded with native species; seed mixes will be approved by BLM personnel.
- Reseeding will include certified/identified weed and weed seed-free mulch, topsoil, manure, fertilizer, animals, and etc.

Low (1-3) No cumulative effects expected.

Moderate (4-7) Possible adverse effects on the site and possible expansion of infestation within the project area. Cumulative effects on native plant communities are likely, but limited.

High (8-10) Obvious adverse effects within the project area and probable expansion of noxious weed infestations to areas outside the project area. Adverse cumulative effects on native plant communities are probable.

The Risk Rating is obtained by multiplying Factor 1 by Factor 2.

For this project, the Risk Rating is Moderate: Factor 1 = (4) and Factor 2 = (5). Risk Rating = (4) * (5) = (20).

Mitigation: The follow-up components of controlling the project area will involve reseeding, monitoring, and spraying as needed to the best management standards.

None (0) Proceed as planned.

Low (1-10) Proceed as planned. Initiate control treatment on noxious weed populations that get established in the area.

Moderate (11-49) Develop preventative management measures for the proposed project to reduce the risk of introduction or spread of noxious weeds into the area. Preventative management measures could include modifying the project to include seeding the area to occupy disturbed sites with desirable species, encouraging project advocate to watch for and report or eradicate any small weed patches in their project area, incorporating weed detection into project compliance inspection activities, encouraging the advocate to attend weed identification workshops when offered, washing vehicles prior to entering project areas, and other actions as appropriate. Monitor the area for at least 3 consecutive years and provide for control of newly established populations of noxious weeds and follow-up treatment for previously treated infestations.

High (50-100) Project must be modified to reduce risk level though preventative management measures, including seeding with desirable species to occupy disturbed sites and controlling existing infestations of noxious weeds prior to project activity, washing all work vehicles before entering the site and at regular intervals throughout the project, requiring project advocate to watch for, report, and eradicate any small weed patches in their project area, incorporating weed detection into project compliance inspection activities, encouraging the advocate to attend weed identification workshops when offered equipment. Project must provide at least 5 consecutive years of monitoring and follow up weed treatment, for previously treated infestations.

Reviewed by: Karen L. Prentice
Noxious Weed Coordinator

Date: _____